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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,050	02/02/2006	Todd Martin Beazley	PUO30191	2427

24498 7590 09/08/2006
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EXAMINER

CHAWAN, SHEELA C

ART UNIT PAPER NUMBER

2624

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/567,050

Applicant(s)

BEAZLEY, TODD MARTIN

Examiner

Sheela C. Chawan

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/2/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The Examiner has approved drawings filed on 2/2/06.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 2/2/06, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 25 is rejected under 35U.S.C. 101 because the claimed invention 25 are directed to non-statutory subject matter. The terminology "A computer-readable medium having computer-executable instructions", alone has no set definition. The following claim formats are acceptable and not subject to a 101 rejection "A computer readable medium encoded with a computer program" for performing the steps of ...". See – MPEP 2106.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed

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in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 - 6,8,17,19, 21 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Tan et al., (US.6, 697, 534 B1).

As to claim 1, Tan discloses a method use in removing noise from image data (abstract), the method comprising:

receiving image data representing an image (fig 4, element 410 capture image device for a local region of a captured image and using adaptively computed crispening parameter on local image content of an image);

filtering the received image data to remove noise therefrom and to provide filtered image data (fig 4, column 9, lines 45- 67, column 10, lines 1-18); and

displaying where the filtering is being performed on the received image data (column 4, lines 46- 67, column 5, lines 37- 42, 64-67, column 6, lines 1- 20).

As to claim 2, Tan discloses the method further comprising the step of displaying the filtered image data (fig 1B, column 5, lines 28- 67, column 6, lines 1-24).

As to claim 3, Tan discloses the method further comprising the step of compressing the filtered image data to provide compressed filtered image data (column 5. lines 40- 46).

As to claim 4, Tan discloses the method further comprising the step of transmitting the compressed filtered image data to an endpoint (column 4, lines 46- 67, column 5, lines 1-67, column 6, lines 1-20).

As to claim 5, Tan discloses the method further comprising the step of, in response to the displaying step, adjusting filter parameters used in the filtering step (column 4, lines 46- 67).

As to claim 6, Tan discloses the method further comprising the step of storing the adjusted filter parameters for future reference in filtering the image data (column 4, lines 46- 67, column 5, lines 37- 42, 64-67, column 6, lines 1-20).

Regarding claim 8, argument analogous those presented for claim 1 are applicable to claim 8. Regarding converting a control signal used in the filtering to a video signal as discloses by Tan as follow (fig 4, column 9, lines 47- 67, column 10, lines 1-16).

As to claim 17, see the rejection of claim 1 and 8.

As to claim 19, see the rejection of claim 1 and 8.

As to claim 21, see the rejection of claim 1 and 8.

As to claim 22, see the rejection of claim 1 and 8.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 9-16, 18, 20, 23 and 24, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tan et al., (US.6, 697, 534 B1), as applied to the claims 1 - 6, 8, 17, 19, 21 and 22 above and further in view of Chun (US. 5,949,916).

Regarding claim 7 and 9 Tan discloses a sharpening an image and, more particularly, to adaptively sharpening local image content of an image. Tan is silent about specifics details of Lee filters.

Chun discloses an automatic regressive (AR) filter and a filtering method thereof, and particularly, to an AR filter which functions as an adaptive filter in a still region of an image and outputs an observed signal unaltered in a moving region of the image in order to remove a blurring phenomenon at the edge of a moving target in that image. The system comprises of: the method wherein the filtering is performed in accordance with a Lee filter (column 1, lines 33- 35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tan to include Lee filter. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tan by the teaching of Chun in order to provide high performance noise removal. Also, the edge of the moving target of the moving picture can be preserved well (as suggested by Chun at column 8, lines 5 - 8).

As to claim 10, Chun discloses the method, wherein the control signal is a smoothing to control signal of the Lee filter (column 1, lines 33-35).

As to claim 11, Tan discloses the method wherein the converting step converts the control signal to a monochrome video signal (fig 4, element 430, column 8, lines 7-67).

As to claim 12, Tan discloses the method wherein the converting step converts the control signal to a monochrome video signal (fig 4, element 430, column 8, lines 7-67).

As to claim 13, Tan discloses the method wherein the image is a black and white representation of edge activity in the filtered image data (fig 6, column 2, lines 62- 67, column 3, lines 1- 42).

As to claim 14, Tan discloses the method wherein the control signal represents a statistical function (fig 6, column 8, lines 7-50, column 9, lines 14-67, column 10, lines 1-19).

As to claim 15, Tan discloses wherein the statistical function is a local variance of at least a portion of the image data (fig 6, column 8, lines 7-50, column 9, lines 14-67, column 10, lines 1-19).

As to claim 16, Tan discloses the method, wherein the portion is a group of pixels of the image data (fig 4, column 9, lines 14- 67).

As to claim 18, Tan discloses the method wherein the adjusting step compares an average brightness level of the displayed image to a predefined average brightness level (column 8, lines 7-50).

As to claim 20, Tan discloses the server wherein the display also shows the filtered image data (column 5, lines 16- 46).

As to claim 23, Chun discloses the apparatus further comprising a multiplexer coupled to the filter, video converter and the display, wherein the multiplexer is responsive to a mode control signal for coupling either the filtered image data or the video signal to the display (column 7, lines 41-67, column 8, lines 1-8).

As to claim 24, Chun discloses the apparatus wherein the filter is a Lee filter and the control signal is a measure of a local variance of at least a portion of the image data (column 1, 27- 35, column 2, lines 41- 48, column 4, lines 46- 58).

Other prior art cited

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Smith et al., (US.5, 352,878) discloses method and apparatus for decoding bar code symbols using independent bar and space analysis.

Simon et al., (US.7, 082,211 B2) discloses method and system for enhancing portrait images.

Jensen et al., (6,697,497 B1) discloses boundary identification and characterization through density differencing.

Kahn (US.6, 678,009 B2) discloses adjustable video display window.

Kim (US.6, 633,342 B2) discloses apparatus and method for compensating image signal.

Chung et al., (US. 6,421,384 B1) discloses system and method for contour-based motion estimation.

Tories et al., (US.4, 908,872) discloses method and apparatus for extracting pattern contours in image processing.

Von Gierke et al., (US.4,238,772) discloses image enhancement using on-line spatial filtering.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela C Chawan whose telephone number is. 571-272-7446. The examiner can normally be reached on Monday - Thursday 7.30 - 6.00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sheela Chawan
Patent Examiner
Group Art Unit 2624
August 29, 2006


SHEELA CHAWAN
PRIMARY EXAMINER